

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

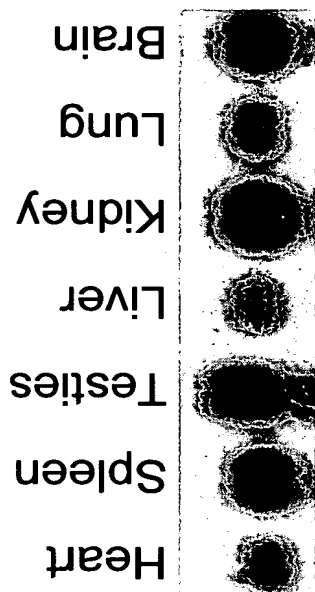
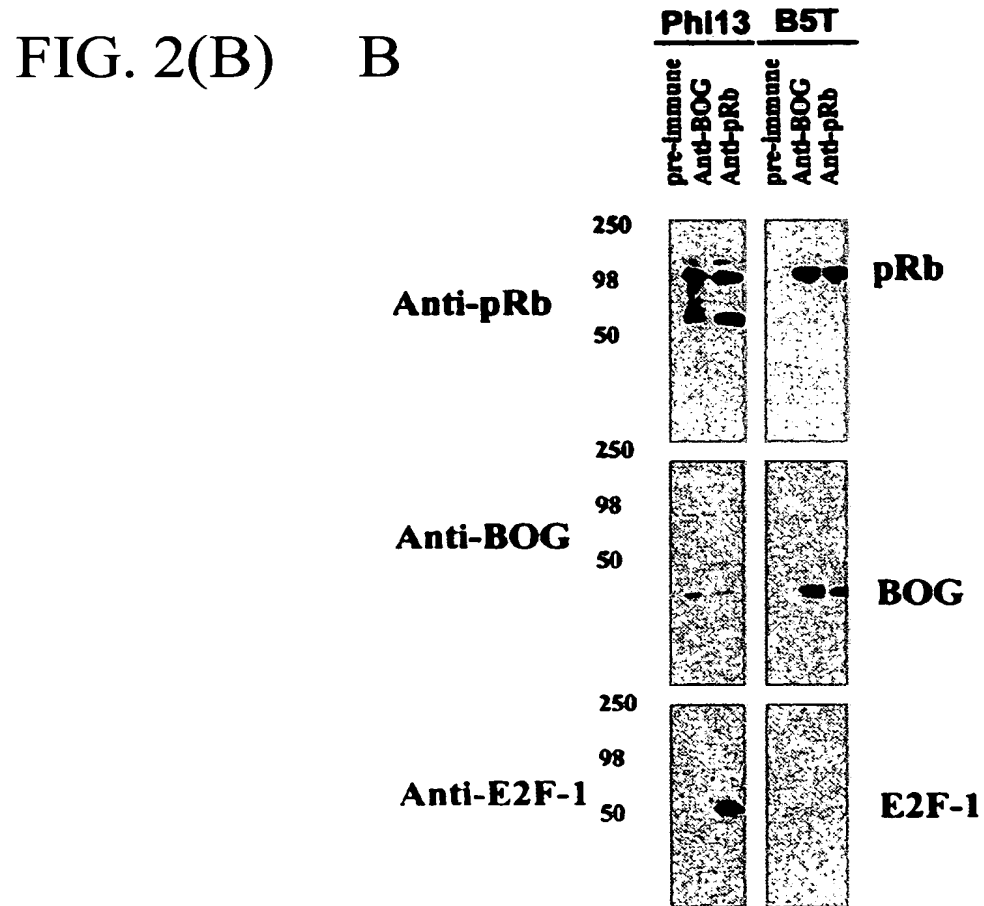
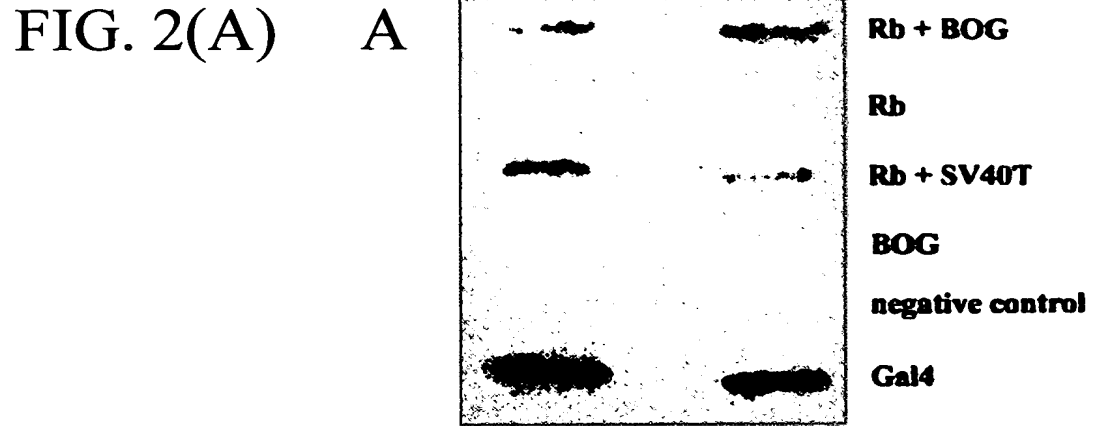


FIG. 1



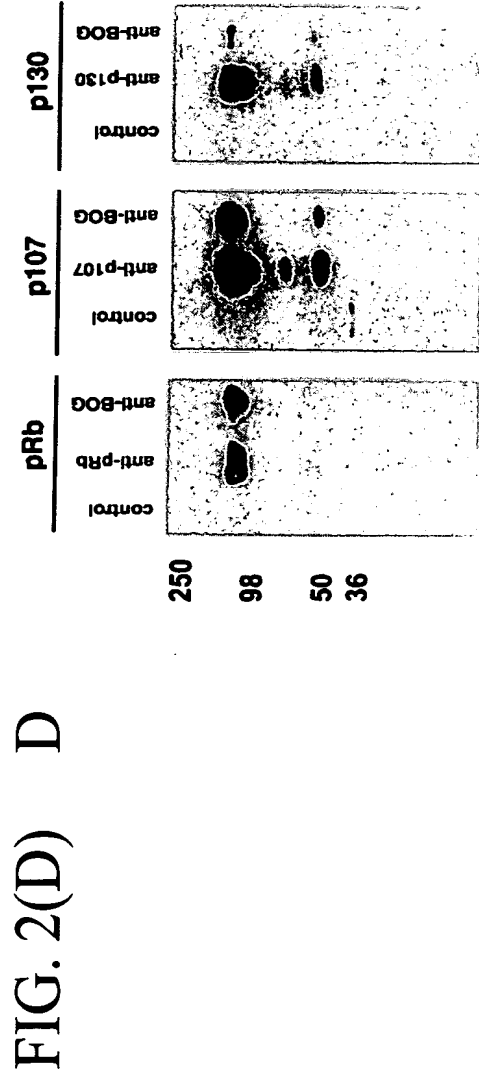
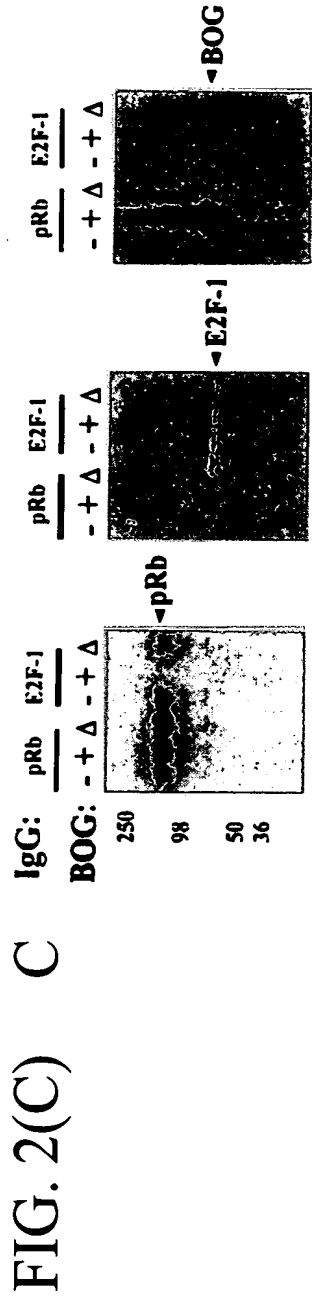


FIG. 3(A)

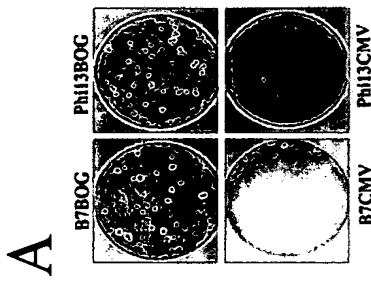


FIG. 3(C)

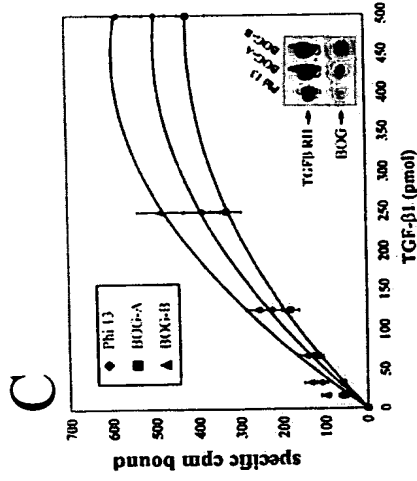


FIG. 3(B)

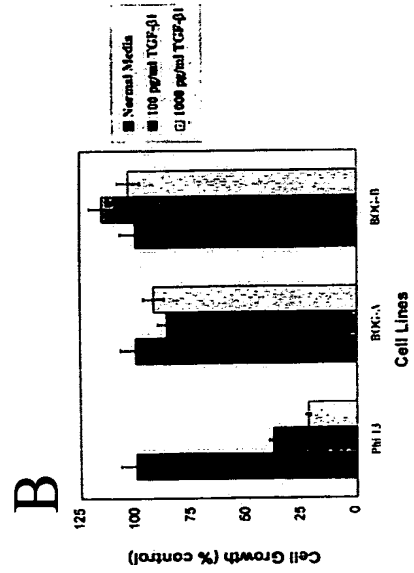
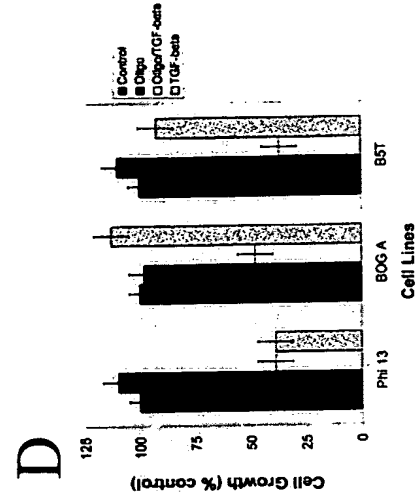


FIG. 3(D)



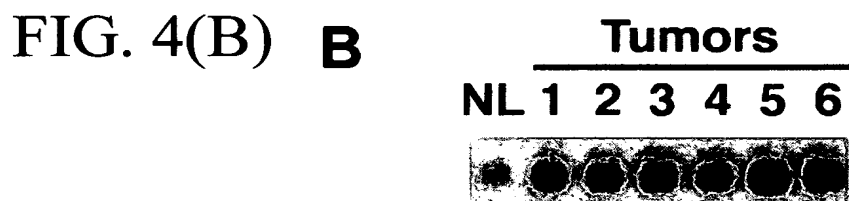


FIG. 5

BLAST SEARCH RESULTS

	Name	Genbank number	Probability P(N)
1	Stratagene mouse melanoma cDNA clone 58378	AA126076 (m683h10.r1)	1.5 e-160
2	Life Tech mouse embryo cDNA 10 5dpc clone 557151	AA111519 (m651h08.r1)	1.5 e-146
3	Soares mouse 3NbMS cDNA clone 622827	AA184284 (m633b02.r1)	2.0 e-126
4	Stratagene mouse embryonic carcinomaRA cDNA clone 535882	AA105466 (m182c06.r1)	1.0 e-120
5	WATMI Homosaplens cDNA clone 501115	N2288 (EST601115)	1.4 e-90

FIG. 6(B)

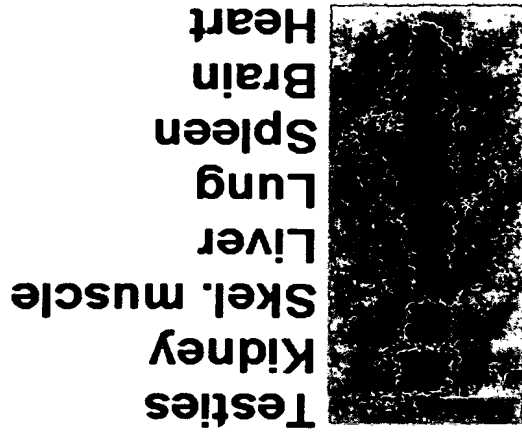


FIG. 6(A)

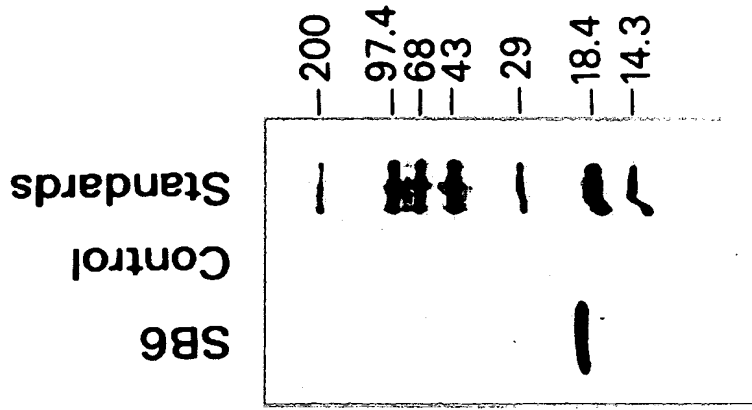


FIG. 7

Genomic Southern Blot

Human
Rat
Mouse
Dog
Cow
Rabbit
Chicken
Yeast

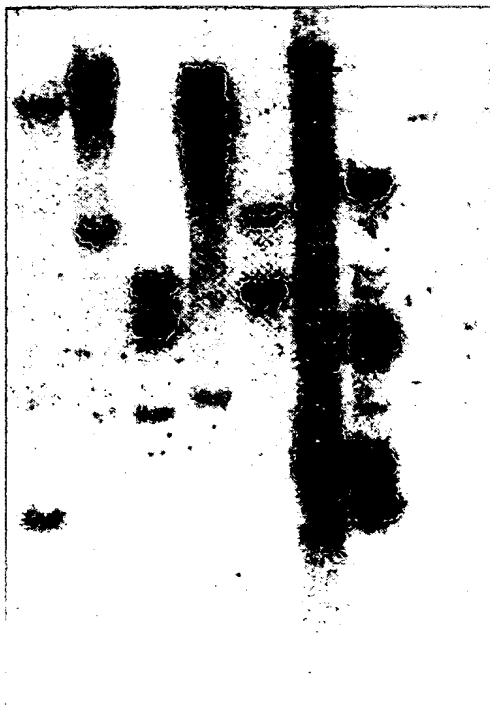


FIG. 8(A)

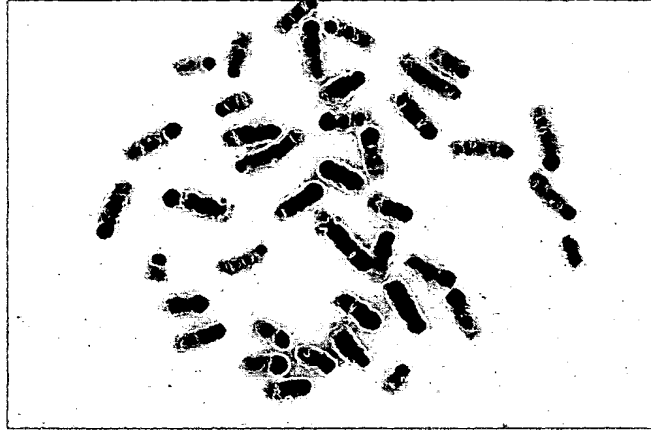


FIG. 8(B)

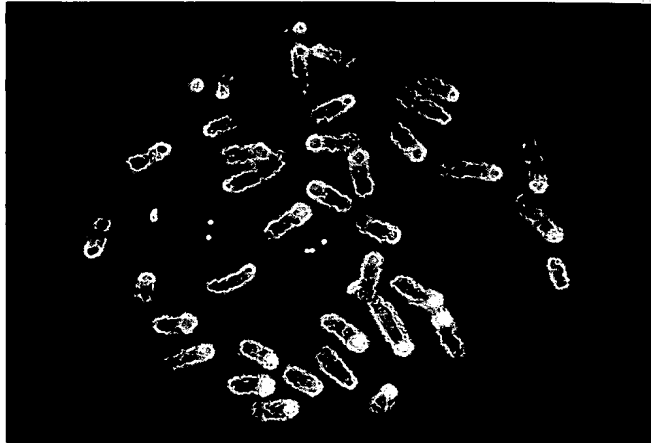


FIG. 8(C)

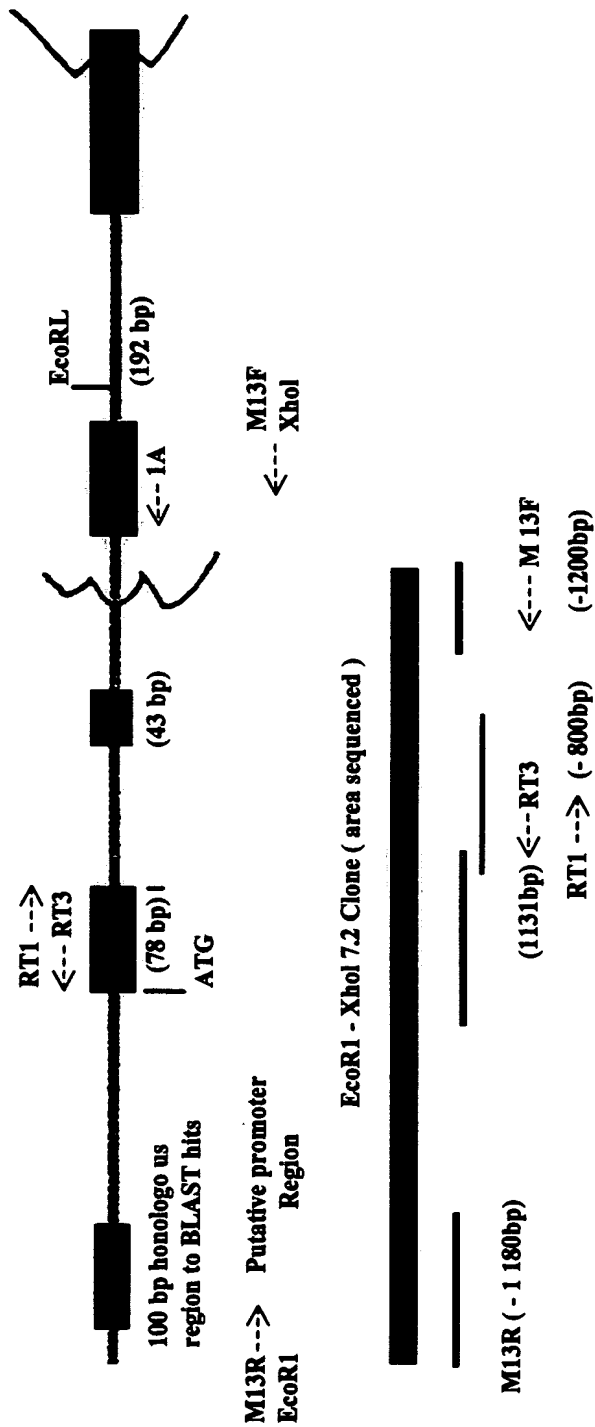


FIG. 9

FIG. 9(A)

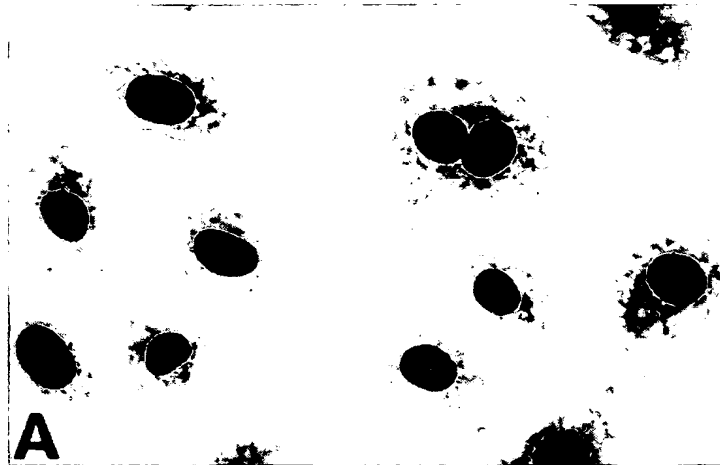


FIG. 9(B)

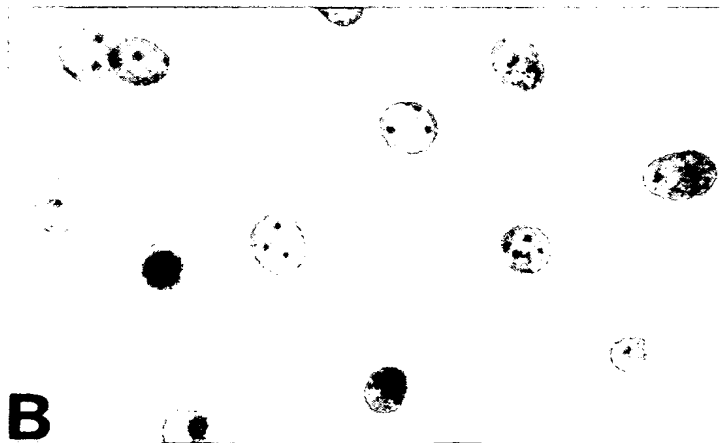


FIG. 10(A) B5T

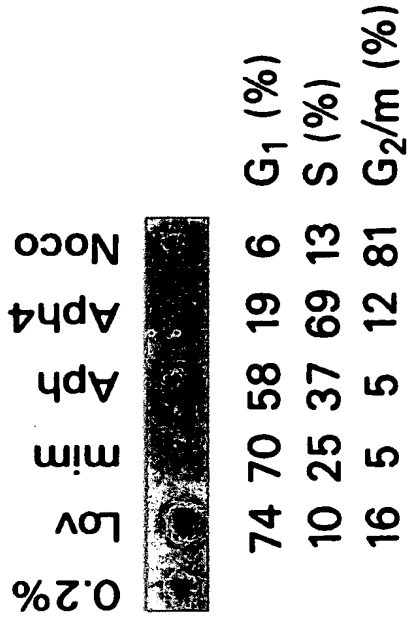


FIG. 10(B) RLE

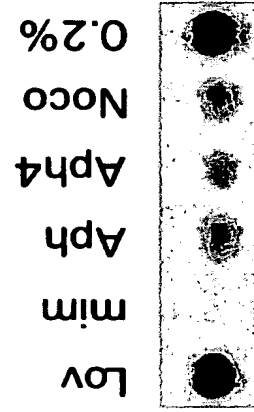


FIG. 11

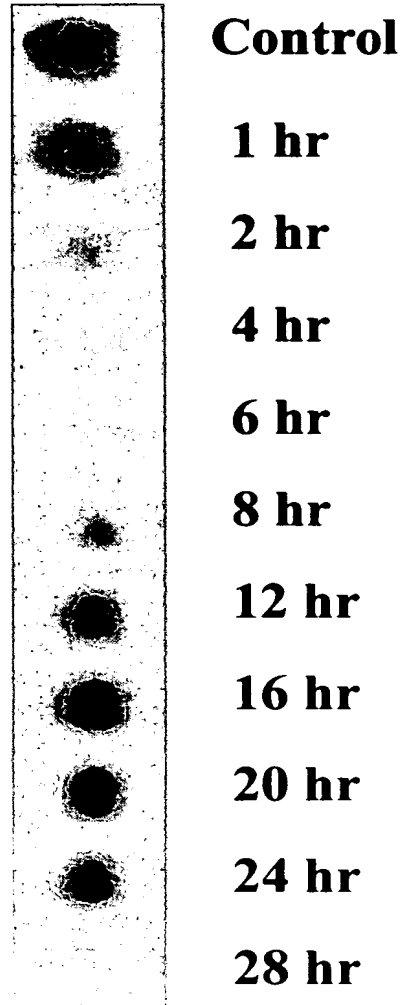


FIG. 12

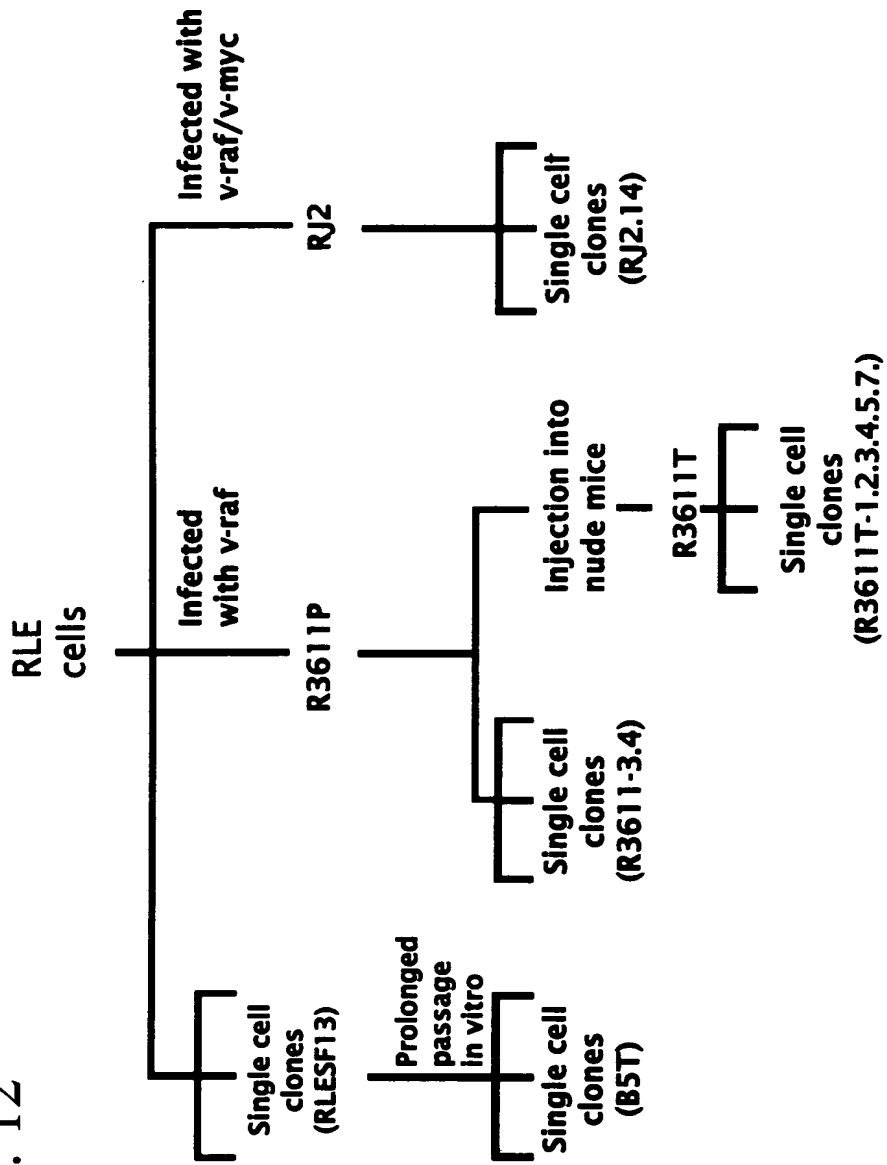


FIG. 13A

Sequence

RLHEXRT-3

```

00001   CAGAGCCCTGAAAGGTTGTTGCATGAGCCCGTGAAAGTGGAGTTTCAGTG
          <----- NF-W1      (16.00 2.0000)
          <----- NF-W2      (16.00 2.0000)
          <----  Zeste      (12.00 2.0000)
          <----  Zeste      (12.00 2.0000)
          -----> BAF1      (10.00 0.8333)

00051   GTAGTGGATAGCATAGGACACTGGAGACACAGTTCATGTCCAGCATTTCAT
          <----- C/EBP      (13.00 1.6250)
          <----- C/EBP      (13.00 1.6250)
          <----- C/EBP      (13.00 1.6250)
          <----- C/EBP      (13.00 1.6250)
          ----> NF-E      (10.00 2.0000)
          -----> GR      (12.00 2.0000)
          -----> ADR1      (10.00 2.0000)
          <----- GR      (12.00 2.0000)
          -----> CBF (2)    (16.00 1.6000)
          -----> SRF      (16.00 1.6000)
          <----- Pit-la    (14.00 2.0000)

00101   GGAGTGGGAGCAGAGAGTTCCTGAAGCTCACTGGCTAGTATTCTTGCTA
          <----  GR      (10.00 2.0000)
          -----> AGP/EBP    (10.00 1.1111)
          -----> C/EBP      (11.00 1.2222)
          -----> C/EBP      (11.00 1.2222)
          -----> C/EBP      (11.00 1.2222)
          -----> C/EBP      (11.00 1.2222)
          -----> C/EBP      (11.00 1.2222)
          -----> C/EBP      (11.00 1.2222)
          -----> LAP      (10.00 1.1111)
          -----> NF-IL6    (10.00 1.1111)
          -----> NF-IL6beta (10.00 1.1111)
          <----- CP2      (10.00 0.9091)
          -----> CPIA      (14.00 2.0000)

```


FIG. 13B

```

-----> CPIB (14.00 2.0000)
<----- ACF (14.00 2.0000)

00151 AACCAATGAGCTCCAAATTCACAGATCTGTGCGCAAACCCAAATGTAAT
-----> C/EBP (10.00 2.0000)
-----> CBF (1) (10.00 2.0000)
-----> CBF (2) (10.00 2.0000)
-----> CBF-A (10.00 2.0000)
-----> CBF-B (10.00 2.0000)
-----> CCAAT-binding factor (10.00 2.0000)
-----> CDF (10.00 2.0000)
-----> CRF (10.00 2.0000)
-----> CTF (10.00 2.0000)
-----> NF-Y (10.00 2.0000)
-----> NF-Y' (10.00 2.0000)
<----- alpha-CBF (10.00 2.0000)
<----- alpha-CP1 (10.00 2.0000)
<----- alpha-CP2a, alpha-CP2b (10.00 2.0000)
<----- alpha-IRP (10.00 2.0000)
<----- CDP (10.00 2.0000)
<----- CDP2 (10.00 2.0000)
<----- Clox (10.00 2.0000)
<----- CP1 (10.00 2.0000)
<----- CP1 (10.00 2.0000)
<----- CP2 (10.00 2.0000)
<----- Cux (10.00 2.0000)
<----- En (16.00 1.6000)
<----- H1TF2 (10.00 2.0000)
<----- NF-1 (10.00 2.0000)
<----- NF-E (10.00 2.0000)
<----- NF-E (10.00 2.0000)
<----- SRF (10.00 2.0000)
<----- TGGCA-binding protein (10.00 2.0000)
-----> HiNF-A (12.00 1.0000)
<----- CP2 (10.00 0.9091)
-----> IUF-1 (10.00 1.6667)
-----> HiNF-A (12.00 1.0000)
<----- AGP/EBP (10.00 1.1111)
<----- AP 3 (2) (13.00 1.6250)
<----- IqPE-1 (16.00 2.0000)
<----- LAP (10.00 1.1111)
<----- NF-IL6 (10.00 1.1111)
<----- NF-IL6beta (10.00 1.1111)

00201 GTGGAATGAAGGAAAAGAAGACACCCCAACTGACTGAATATGGTGACA
<----- HSF (14.00 0.9333)
<----- HSF (14.00 0.9333)
<----- HSF (14.00 0.9333)
<----- HSF1 (long) (14.00 0.9333)
<----- HSF1 (short) (14.00 0.9333)

```

FIG. 13C

```

<----- HSF1 (14.00 0.9333)
-----> c-Ets-2 (12.00 2.0000)
<----- c-Ets-1 54 (11.00 1.8333)
<----- c-Ets-1 68 (11.00 1.8333)
<----- c-Ets-2 58-64 (11.00 1.8333)
<----- PEA3 (11.00 1.8333)
<----- PEA3 (11.00 1.8333)
<----- PEA3 (11.00 1.8333)
-----> GR (12.00 2.0000)
<----- CACCC-binding factor (10.00 2.0000)
<----- gammaCAC1 (10.00 2.0000)
<----- gammaCAC2 (10.00 2.0000)
-----> AP-1 (16.00 2.0000)
-----> GCN4 (12.00 2.0000)
-----> delta factor (12.00 1.0909)
-----> YY1 (12.00 1.0909)
<----- myc-CF1 (10.00 1.6667)
-----> p300 (14.00 2.0000)
00251 CTCCCTTTAATGCCAGCACTCAGGAGACAAAAGCAGGCAGATCTTTTG
-----> NF-1/L (10.00 2.0000)
-----> GCN4 (12.00 2.0000)
<----- Zeste (12.00 2.0000)
<----- Zeste (12.00 2.0000)
-----> ADR1 (10.00 2.0000)
-----> Lvc (10.00 2.0000)
-----> Zeste (10.00 2.0000)
-----> Zeste (10.00 2.0000)
00301 TGAGTTCTAGGCCAGTCTGGTTTACATAGACAGCTCCAGGCCAGTAAGGG
<----- GR (12.00 2.0000)
-----> NF-IL-2A (16.00 1.6000)
-----> Oct-1 (16.00 1.6000)
-----> Oct-2.1 (16.00 1.6000)
<----- VBP (20.00 1.6667)
-----> NF-E (10.00 2.0000)
<----- T-Ag (10.00 2.0000)
-----> E4BP4 (12.00 1.2000)
00351 GCTAGCTAATGAACTGTCTTAAACAAATTAACCAACGTTTCATTGAAAA
-----> IUF-1 (10.00 1.6667)
<----- STE12 (16.00 2.0000)
<----- NF-E (10.00 2.0000)
<----- Ftz (18.00 1.6364)
-----> HOXA5 (10.00 1.0000)
-----> c-Ets-2 (12.00 2.0000)
<----- EcR (11.00 1.0000)
-----> TEIID (12.00 2.0000)
-----> Hb (20.00 2.0000)
00401 AAAATAAACCTTCCTTAAAGAAGTATTGGTACAACATAAAAAGATAAC
-----> AGP/EBP (10.00 1.1111)

```

FIG. 13D

```

-----> c-Ets-1 54 (11.00 1.8333)
-----> c-Ets-1 68 (11.00 1.8333)
-----> c-Ets-2 58-64 (11.00 1.8333)
-----> LAP (10.00 1.1111)
-----> NF-IL6 (10.00 1.1111)
-----> NF-IL6beta (10.00 1.1111)
-----> PEA3 (11.00 1.8333)
-----> PEA3 (11.00 1.8333)
-----> PEA3 (11.00 1.8333)
<----- kappaY factor (16.00 2.0000)
<----- c-Ets-2 (12.00 2.0000)
-----> alpha-CBF (10.00 2.0000)
-----> alpha-CP1 (10.00 2.0000)
-----> alpha-CP2A, alpha-CP2b (10.00 2.0000)
-----> alpha-IRP (10.00 2.0000)
-----> CDP (10.00 2.0000)
-----> CDP2 (10.00 2.0000)
-----> Clox (10.00 2.0000)
-----> CP1 (10.00 2.0000)
-----> CP1 (10.00 2.0000)
-----> CP2 (10.00 2.0000)
-----> Cux (10.00 2.0000)
-----> H1TF2 (10.00 2.0000)
-----> NF-1 (10.00 2.0000)
-----> NF-E (10.00 2.0000)
-----> NF-E (10.00 2.0000)
-----> SRF (10.00 2.0000)
-----> TGGCA-binding protein (10.00 2.0000)
<----- C/EBP (10.00 2.0000)
<----- CBF (1) (10.00 2.0000)
<----- CBF (2) (10.00 2.0000)
<----- CBF-A (10.00 2.0000)
<----- CBF-B (10.00 2.0000)
<----- CCAAT-binding factor (10.00 2.0000)
<----- CDF (10.00 2.0000)
<----- CRF (10.00 2.0000)
<----- CTF (10.00 2.0000)
<----- NF-Y (10.00 2.0000)
<----- NF-Y' (10.00 2.0000)
-----> HOXA5 (10.00 1.0000)
-----> Hb (16.00 1.6000)
-----> GATA-1 (12.00 2.0000)
<----- GATA-1 (10.00 1.6667)
<----- GATA-1 (10.00 1.6667)
<----- GATA-1 (10.00 1.6667)
<----- GATA-2 (10.00 1.6667)
<----- GATA-2 (10.00 1.6667)
<----- GATA-2 (10.00 1.6667)

```

FIG. 13E

```

<----- GATA-2 (12.00 2.0000)
<----- GATA-3 (10.00 1.6667)
<----- GATA-3 (10.00 1.6667)
<----- GATA-3 (10.00 1.6667)
<----- GATA-3 (10.00 1.6667)
<----- GATA-3 (10.00 1.6667)
<----- NF-E1b (10.00 1.6667)
<----- NF-E1c (10.00 1.6667)
----> DBF-A (10.00 2.0000)
<---- GAL4 (10.00 2.0000)
<---- TBP (10.00 2.0000)
00451 ACATTATGAGCAGCTGTTGCCAGCACATAAGGGATGTGGAGTATGAGAA
----> NF-1/L (10.00 2.0000)
----> GCR1 (10.00 2.0000)
-----> C/EBP (14.00 1.7500)
-----> C/EBP (14.00 1.7500)
-----> C/EBP (14.00 1.7500)
-----> C/EBP (14.00 1.7500)
-----> C/EBP (14.00 1.7500)
00501 GCGTGGAAAAGGGTAAATCAAAGATAATTAATATTTGATGGTAATTCAC
<----- AGP/EBP (13.00 1.8571)
-----> H1NF-A (12.00 1.0000)
<----- Kr (16.00 1.6000)
<---- Pit-1a (10.00 2.0000)
----> GATA-1 (12.00 2.0000)
<----- GATA-1 (10.00 1.6667)
<----- GATA-1 (10.00 1.6667)
<----- GATA-1 (10.00 1.6667)
<----- GATA-1 (10.00 1.6667)
<----- GATA-2 (10.00 1.6667)
<----- GATA-2 (10.00 1.6667)
<----- GATA-2 (10.00 1.6667)
<----- GATA-2 (12.00 2.0000)
<----- GATA-3 (10.00 1.6667)
<----- GATA-3 (10.00 1.6667)
<----- GATA-3 (10.00 1.6667)
<----- GATA-3 (10.00 1.6667)
<----- GATA-3 (10.00 1.6667)
<----- NF-E1b (10.00 1.6667)
<----- NF-E1c (10.00 1.6667)
-----> DBF-A (10.00 2.0000)
-----> HOXA5 (10.00 1.0000)
<----- GAL4 (10.00 2.0000)
<----- TBP (10.00 2.0000)
<----- N-Oct-3 (12.00 1.7143)
<----- N-Oct-3 (12.00 1.7143)
<----- N-Oct-3 (12.00 1.7143)
00551 AGGTTTGAGTTTAGCTGCCTGTGCTTTAGCCAGAAAATGCGTAGGCCTGC
----> Zeste (10.00 2.0000)

```

FIG. 13F

```

-----> Zeste (10.00 2.0000)
          <----- CP2 (11.00 1.0000)
                                -----> Ker1 (16.00 1.6000)
                                <---- Lvc (10.00 2.0000)
00601 AGGTATCCAAGAACTACAATTCCCAGAAGTCCGCGAGTGCAGGCTCTGGGC
          -----> GR (12.00 2.0000)
          -----> AGP/EBP (13.00 1.8571)
          -----> IL-6 RE-BP (18.00 2.0000)
          -----> IL-6 RE-BP (18.00 2.0000)
                                <----- Spl (16.00 1.6000)
          -----> Spl (10.00 2.0000)
          -----> Lvc (10.00 2.0000)
          -----> GAL4 (10.00 2.0000)
          -----> GR (10.00 2.0000)
                                <---- T-Ag (10.00 2.0000)
          -----> GCF (10.00 1.4286)
                                <----- Elk-1 (10.00 1.0000)
                                <----- c-Ets-1 (16.00 1.6000)
                                <----- c-Ets-1 54 (12.00 1.5000)
                                <----- c-Ets-1 68 (12.00 1.5000)
                                <----- c-Ets-1 (12.00 1.5000)
                                <----- PEA3 (12.00 1.5000)
                                <----- PEA3 (12.00 1.5000)
                                <----- PEA3 (12.00 1.5000)
                                -----> Bcd (16.00 1.6000)
                                <----- E1A-F (14.00 2.0000)
00651 CGGATGTAGTCTTGGTCTGAGAGCTGCTGGTCCAAGCTGGGCAAGGTCTC
-----> GCR1 (10.00 2.0000)
          <----- EFII (18.00 1.6364)
                                <---- H4TF-2 (10.00 2.0000)
          -----> GCF (10.00 1.0000)
          -----> T-Ag (10.00 2.0000)
          -----> LF-A1 (10.00 2.0000)
          -----> ELP (14.00 2.0000)
          -----> ADR1 (10.00 2.0000)
00701 CCACGTCTACATTC

```